Successful treatment of sarcoidosis with leflunomide

Sir, Leflunomide (Arava) is an inhibitor of pyrimidine synthesis that has immunomodulating/immunosuppressive properties. Although currently approved for the management of patients with rheumatoid arthritis, it has been used with some success in several other autoimmune
Letters to the Editor

Sarcoidosis is a multisystem granulomatous disorder characterized pathologically by the presence of non-caseating granulomas in the organs involved. Although sarcoidosis most frequently involves the lung, extrathoracic manifestations, including cutaneous involvement, are common [1]. Corticosteroids remain the mainstay of treatment of sarcoidosis and are started at a daily dose of 20–80 mg tapering to 5–15 mg. Several cytotoxic agents have been used to treat sarcoidosis and are clearly of value in selected patients, though controlled studies are lacking. On the basis of safety and efficacy, methotrexate and azathioprine are often the preferred agents [2, 3]. Cyclophosphamide [3] should be reserved for refractory cases. Other agents that have been used with varying success include chloroquine and hydroxychloroquine [4], cyclosporin [5] and pentoxifylline [6]. Leflunomide probably acts as an immunomodulatory agent by interfering with the de novo synthesis of pyrimidines, and is a specific inhibitor of T-cell proliferation [7]. Leflunomide is 80% bioavailable orally and is rapidly converted by the liver and intestinal wall to the active metabolite, A77-1726, which itself has a half-life of about 15 days. The effect of leflunomide is selective for proliferating lymphocytes and is reversible, accounting for an improved toxicity profile. In addition to its use in rheumatoid arthritis, leflunomide has been an effective alternative in the treatment of other autoimmune diseases, such as Sjögren syndrome and Wegener’s granulomatosis, and has also produced beneficial effects in several animal models of autoimmunity, including systemic lupus erythematosus and myasthenia gravis [8, 9]. A poor therapeutic response and intolerance to the usual immunosuppressive agents led to the use of leflunomide in our patient. A convincing improvement of his disease without concurrent corticosteroid therapy was a satisfactory result.

In the case described here, a favourable response to leflunomide in a patient with otherwise rather refractory sarcoidosis suggests that leflunomide may prove to be a safe and effective alternative to currently accepted therapies for sarcoidosis. Results in this initial case suggest that further clinical trials to establish the efficacy of leflunomide in the treatment of sarcoidosis are warranted.

V. MAJITHIA, S. SANDERS, V. HARISDANGKUL, J. G. WILSON

Department of Rheumatology and Molecular Immunology, L-525, Clinical Science Building, University of Mississippi Medical Center, 2500 N State Street, Jackson, MS 39216, USA.
Accepted 7 October 2002
Correspondence to: V. Majithia. E-mail: vmajithia@medicine.umsmed.edu